

4.4.2-1 INTRODUCTION

This chapter describes waterbodies within the limits of the Project, which include the Genesee River and a small stream ("Stream B"). The chapter begins by identifying federal and state regulations pertaining to the protection of surface waters and then describes existing conditions in the Project area. The chapter concludes with an assessment of the potential impacts of the Project on water quality and other conditions of the surface waters within the Project site and its vicinity.

4.4.2-2 METHODOLOGY

Many activities associated with the Project would require compliance with applicable federal legislation and regulatory programs, which also implicate state legislation and/or regulatory programs that are intended to protect and regulate surface waters. The applicable federal and New York state laws and regulatory programs are described below.

- ***Clean Water Act (33 USC §§ 1251 to 1387):*** The objective of the Clean Water Act (CWA), also known as the Federal Water Pollution Control Act, is to restore and maintain the chemical, physical, and biological integrity of waters of the United States. Waters of the United States include streams, rivers, wetlands, and other features that meet the specified requirements defined in 33 CFR 328.3. The Clean Water Act regulates point sources of water pollution (such as discharges of municipal sewage and industrial wastewater and discharges of dredged or fill material into navigable waters and other waters of the United States) and non-point source pollution (such as runoff from streets, agricultural fields, construction sites, and mining).

Section 404 of the Act requires authorization from the Secretary of the Army, acting through the U.S. Army Corps of Engineers (USACE), for the discharge of any dredged or fill material into waters of the United States. Activities authorized under Section 404 must comply with Section 401 of the Act.

Under Section 401 of the Act, any applicant for a federal permit or license for an activity that may result in a discharge into navigable waters of the United States must provide to the federal agency issuing a permit a certificate (either from the state where the discharge would occur or from an interstate water pollution control agency) that the discharge would comply with Sections 301, 302, 303, 306, 307, and 316 (b) of the Clean Water Act.

- ***Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403):*** Section 10 of the Rivers and Harbors Act requires authorization from the USACE for: 1) the construction of any structure in or affecting any navigable waters of the United States; 2) the excavation/dredging or deposition of material in navigable waters; or 3) any obstruction or alteration in navigable waters. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structures or work affects the course, location, condition, or capacity of the water body.
- ***Protection of Waters, Article 15, Title 5, New York State Environmental Conservation Law (ECL), Implementing Regulations 6 NYCRR Part 608:*** The New York State Department of Environmental Conservation (NYSDEC) is responsible for administering

Protection of Waters regulations to prevent undesirable activities on surface waters (streams, lakes, and ponds). The Protection of Waters Permit Program regulates five different categories of activities: disturbance of stream beds or banks of a protected stream or other watercourse; construction, reconstruction, or repair of dams and other impoundment structures; construction, reconstruction, or expansion of docking and mooring facilities; excavation or placement of fill in navigable waters and their adjacent and contiguous wetlands; and Water Quality Certification for placing fill or other activities that result in a discharge to waters of the United States in accordance with Section 401 of the CWA. As discussed in Chapter 4.1 of the DEIS, Norfolk Southern is not subject to certain state and local regulations, because of a pre-emption established by federal law to avoid barriers to interstate commerce. Nonetheless, Norfolk Southern will comply with state and local regulations when feasible and appropriate.

Surface water and groundwater quality standards and effluent limitations in New York State are regulated pursuant to 6 NYCRR Parts 701 and 703. Part 701, Classifications – Surface Waters and Groundwater, assigns specific categories to New York waters. These standards establish the designated uses to be achieved and specify the water quality criteria necessary to protect surface waters.

- **State Pollutant Discharge Elimination System (SPDES) (N.Y. ECL Article 3, Title 3; Article 15; Article 17, Titles 3, 5, 7, and 8; Article 21; Article 70, Title 1; Article 71, Title 19; Implementing Regulations 6 NYCRR Articles 2 and 3):** Under Section 402 of the federal Clean Water Act, stormwater discharges to the waters of the U.S. require authorization by a National Pollutant Discharge Elimination System (NPDES) permit or an authorized state permit program. New York State has established the State Pollutant Discharge Elimination System (SPDES) program for controlling wastewater and stormwater discharges to groundwaters and surface waters; the SPDES program is an authorized program under the CWA. New York State has established the SPDES program for controlling wastewater and stormwater discharges to groundwaters and surface waters.

4.4.2-3 EXISTING CONDITIONS

4.4.2-3-1 Surface Waters

The Project site and its vicinity contain two surface water bodies that contribute to the overall hydrology of the area. The Genesee River is a perennial river that flows northerly from its headwaters in Ulysses, Pennsylvania to Lake Ontario at Rochester, New York. Within Letchworth State Park, this portion of the Genesee River is a NYSDEC-mapped stream (Ont. 117-3.1) classified as a Class B Fresh Surface Water. As set forth in NYDEC's regulations, the best usages of Class B waters are primary and secondary contact recreation and fishing. Class B waters are suitable for fish, shellfish, and wildlife propagation and survival. Class B streams are NYSDEC-designated "protected streams" and are regulated under ECL Article 15 Part 608.

To comply with the Federal Clean Water Act, NYSDEC Division of Water provides regular, periodic assessments of the water resource quality within the State. The most recent report for the Genesee River, *The 2001 Genesee River Basin Waterbody Inventory and Priority Waterbodies List*, was issued by NYSDEC in March 2003. The Project site is located in the Upper Genesee River, which has been characterized with high silt/sediment loading. A great extent of this sediment loading is considered to be related to the river's flow through an alluvial plain with highly erodible soils, steep stream beds, and lake banks. The report acknowledges the extensive agricultural activity and land development surrounding the Genesee River that may contribute to the sediment loading.

Section 303(d) of the Federal Clean Water Act also requires states to identify Impaired Waters, where specific designated uses are not fully supported. The portion of the Genesee River in the

project site is not listed on the *Final New York State 2010 Section 303 (d) List of Impaired/TMDL Waters*. Therefore, its existing water quality characteristics meet its NYSDEC water quality designation.

An unnamed stream located on the western side of the Genesee River gorge flows easterly into the Genesee River. This intermittent stream, identified as Stream B, flows beneath the railroad right-of-way within an approximately four-foot square limestone culvert. The downstream portion of the culvert appears to be partially collapsed; however, a substantial amount of water continues to pass through the culvert. Norfolk Southern has improved an upstream portion of the drainage way to enhance drainage and slope stability. Based on NYSDEC mapping, this stream (Ont. 117-91) is identified as a Class B Fresh Surface Water, which is regulated pursuant to water quality standards promulgated for Class B Waters. As set forth in NYDEC's regulations (6 NYCRR § 701.7), the best usages of Class B waters are primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival. Pursuant to NYSDEC's regulations, the water quality "shall be suitable for primary and secondary contact recreation, although other factors may limit use for these purposes." Class B streams are NYSDEC-designated "protected streams" per ECL Article 15, and the implementing regulations in 6 NYCRR Part 608. Tributaries, including Stream B, of the portion of the Genesee River in the Project site are not listed on the *Final New York State 2010 Section 303 (d) List of Impaired/TMDL Waters*. Therefore, Stream B is consistent with NYSDEC's Class B designation and intended use.

Navigable Waters

The Buffalo District of USACE considers the Genesee River to be navigable from its mouth at Lake Ontario to Black Creek, which is about 119 miles upstream at Belfast, New York. This stretch of the Genesee River includes the portion that flows through Letchworth State Park. This is most likely because of the river's use in the past, in combination with the nearby canal, to transport interstate commerce. The Genesee Valley Canal (1836-1878) improved the river and was used for navigation through the Project site.

Although still classified as a navigable waterway by USACE, safe navigation is not possible along the portion of the Genesee River within Letchworth State Park. The improvements which made the Genesee River navigable were abandoned in 1880, and the presence of the three waterfalls and the Mt. Morris Dam located downstream of the Portageville Bridge impede safe navigation through the area. Nonetheless, Section 10 of the Rivers and Harbors Act still applies to the Genesee River in Letchworth State Park.

Stream B is not listed as a navigable water of the United States and is not a navigable waterway as defined by the USACE regulations, because it is not currently being used, and has not been used in the past, to transport substantial interstate commerce and it is not subject to the ebb and flow of tide.

Stream Bed and Bank Protection

The Genesee River flows through the deeply channelized Genesee River gorge within Letchworth State Park. Much of the stream bed within the Genesee River is composed of exposed shale/limestone/sandstone bedrock. Where the bridge passes over the gorge, shotcrete has been applied to portions of the gorge walls to protect them from erosion.

The piers of the Portageville Bridge that are located within the Genesee River may have altered the flow of the river around the piers by altering sediment deposition and flow velocity.

4.4.2-4 EFFECTS ASSESSMENT

4.4.2-4-1 No Action Alternative

The No Action Alternative would not involve any changes to the existing Portageville Bridge, but as part of a separate and independent undertaking, modifications are proposed to the railroad right-of-way to assist drainage of Stream B under the railroad bed in the western portion of the Project site. A series of directionally bored culverts would be constructed to assist drainage of Stream B under the railroad bed in the western portion of the Project site. Temporary disturbance to the sediments of this watercourse would be expected to occur during the modifications, but these would not result in any permanent negative impacts to this watercourse.

4.4.2-4-2 Preferred Alternative

As described above, as an independent activity from the proposed Project, modifications are proposed to the railroad right-of-way to assist drainage of Stream B under the railroad bed in the western portion of the Project site. As discussed in Chapter 4.5, "Construction Effects," no additional modifications would be required to Stream B or its drainage culvert and therefore, the Project would not result in an adverse impact on the drainage of Stream B.

As discussed in Chapter 4.5, "Construction Effects," the new bridge in the Preferred Alternative would be installed outside of the stream bed and banks of the Genesee River. Temporary construction access elements within the river described in detail in Chapter 4.5, "Construction Effects" (e.g., temporary fill and work trestle) would be removed and the original contours restored upon completion of construction and would not result in long-term adverse impacts to the river. Furthermore, soil erosion measures would be implemented as part of a Stormwater Pollution Prevention Plan (SWPPP) during construction of the bridge. These measures would serve to minimize the potential for pollutants from construction activities to result in short- or long-term impact on water quality of the Genesee River. In addition, the long-term use of the bridge would not result in adverse impacts to water quality of the Genesee River. Therefore, the Project would not result in adverse impacts the Genesee River during bridge operation. The removal of the existing piers during construction could result in temporary disturbance to water quality, but because the bottom of the Genesee River consists primarily of bedrock, temporary water quality degradation would be minimal and localized; these impacts would mostly be limited to increased turbidity and suspended sediments that may have deposited around the existing piers. In-water construction for the demolition of the existing pier structures would employ mitigation measures, such as the use of turbidity curtains, where feasible and necessary to minimize short- and long-term impacts to the river. Shortly after pier removal, water quality in the area would be expected to return to a level consistent with the river's intended use and removal of the piers would allow the river to return to its natural, free-flowing condition. Therefore, the permanent removal of the existing piers would not result in a long-term adverse impact to water quality of the Genesee River and would result in a long-term benefit.

4.4.2-5 SUMMARY OF MITIGATION

A Section 10 permit under the Rivers and Harbors Act or a Section 404 permit under the Clean Water Act will be obtained from the USACE for the temporary construction access elements that would be placed within the river and for the removal of existing bridge piers. Norfolk Southern will work with NYSDEC to address the agency's concerns related to NYSDEC Protection of Waters permit and other regulations. Measures such as the use of turbidity curtains would be employed where feasible and necessary to minimize impacts to the river. To address erosion and sediment loading into the surface waters, an erosion and sediment control plan will be prepared and implemented as part of a Stormwater Pollution Prevention Plan. These measures would mitigate potential adverse impacts on surface water bodies and watercourses from the Project.